

ABSTRACT

The present invention relates to structures of a high voltage device and a low voltage device formed on a SOI substrate and a method for manufacturing the same, and it is characterized in which the low voltage 5 device region of silicon device regions in a SOI substrate is higher than the high voltage device region by steps, and a thickness of the silicon device region, where the high voltage device is formed, is equal to a junction depth of impurities of a source and drain in the low voltage device. Accordingly, silicon device regions in the SOI substrate are divided into the high voltage region 10 and the low voltage region and steps are formed there between by oxidation growth method, so that the high voltage device having low junction capacitance can be made, and the low voltage device compatible with the conventional CMOS process and device characteristics can also be made at the same time.